

**ORANGE COUNTY EMS AGENCY
PARAMEDIC PHARMACOLOGY HANDBOOK**

MEDICATION: MARK I KITS	ADULT DOSE (HEALTHY ADULTS 12-65 YEARS)	PEDIATRIC DOSE	SIDE EFFECTS	PRECAUTIONS/COMMENTS
<p>CLASSIFICATION: Nerve agent antidote</p> <p>MECHANISM OF ACTION:</p> <ul style="list-style-type: none"> Reactivates cholinesterase enzyme at nerve ending. Re-establishes normal skeletal muscle contractions. <p>INDICATIONS:</p> <ul style="list-style-type: none"> Primary: Symptoms of nerve agent poisoning. Secondary: Symptoms of organophosphate poisoning. <p>CONTENTS:</p> <ul style="list-style-type: none"> Atropine: 2 mg/0.7 mL auto-injector Pralidoxime (2-PAM, Protopam): 600 mg/2 mL auto-injector 	<p><u>Mild/moderate symptoms:</u></p> <ul style="list-style-type: none"> 1-2 MARK I kits at 10 minute intervals, maximum of 2 MARK I kits. <p><u>Severe symptoms:</u></p> <ul style="list-style-type: none"> 3 MARK I kits in rapid succession. <p><u>Elderly patients or patients with underlying cardiovascular or renal disease:</u></p> <ul style="list-style-type: none"> In general, these patients should receive a lower dose, about one-half of the adult dose, and may not be able to receive nerve agent antidotes via auto-injectors. 	<ul style="list-style-type: none"> In general, these patients cannot receive nerve agent antidotes via auto-injectors. 	<ul style="list-style-type: none"> Those noted for atropine and for pralidoxime. 	<ul style="list-style-type: none"> The auto-injectors in MARK I kits deliver a pre-measured dose of atropine (2 mg) and pralidoxime (600 mg). This may be more than the calculated dose of these drugs for pediatric patients (<12 years), the elderly patient (> 65 years), or for patients with underlying cardiovascular or renal disease. For this reason, children < 12 years, children weighing less than 30 kg, elderly patients (especially those elderly patients who weigh less than 80 kg), and adults with underlying cardiovascular and renal disease should not receive nerve agent antidotes via the MARK I kits.